MICROFILMING STANDARDS AND GLOSSARY OF TERMS

Service Categories

There are nine service categories. Those categories are as follows:

Category I – Paper to Microform 25,000 to 1,000,000 Images
Category II – Paper to Electronic 25,000 to 1,000,000 Images
Category III – Microform to Electronic 25,000 to 1,000,000 Images
Category IV – Paper to Microform 1,000,001 to 10,000,000 Images
Category V – Paper to Electronic 1,000,001 to 10,000,000 Images
Category VI – Microform to Electronic 1,000,001 to 10,000,000 Images
Category VII – Paper to Microform 10,000,000 Images and above
Category VIII – Paper to Electronic 10,000,000 Images and above
Category IX – Microform to Electronic 10,000,000 Images and above

Standards For Film

Raw film to meet the following specifications:

ANSI PH1.25-1984 - Safety Photographic Film

ANSI/AIIM MS14-1988 (R 1996)- Specification for 16mm and 35mm Roll Microfilm.

Standards for Imaged Film

Silver film to be developed in accordance with:

NAPM IT9.1-1996- Silver gelatin type specifications for stability. Within this standard there is a reference to the ANSI PH4.8 ANSI IT9.1 includes a chart which presents the current allowable residual thiosulfate.

Performance of a methylene blue test as ANSI standards dictate:

ANSI PH4.8-1985 specifically addresses how to determine and measure residual thiosulfate and other chemicals in film, plates, and papers.

Each camera will be tested with a test chart, to provide a valid comparison of equipment and mechanical optical conditions. The test also insures continuous quality of microfilming, readability comparisons, and aids in locating specific malfunctions in equipment. The target conforms to all requirements of ANSI ISO 3334-1979. ANSI/AIIM MS17-1992 refers to the test chart for rotary microfilm cameras.

An image quality test report is created to record the information gathered from each test.

Blip encoding to be in compliance with ANSI/AIM MS8-1988 (R1998) with regard to the agency's preferred retrieval system.

Developed film should be inspected to ensure compliance with ANSI/AIIM MS23-1983. The agency and the contractor should agree on "acceptable" density and resolution ranges within this standard. (Density may be affected by color and quality of source documents.)

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ANSI/AIIM MS 23-1998 - defines the operational procedures, inspection, and quality control of first generation silver-gelatin microfilm of documents.

Standards for Duplicate Film

Silver duplicating film has the same standards listed above for original developed film.

Diazo duplication film should be processed in accordance with the following:

ANSI/AIIM MS43-1998- Operational procedures/inspection and quality control of duplicate microforms of documents and from COM.

ANSI/ISO 8225 –1995, ANSI/NAPM IT 9.5-1996 IT9.-1987 Ammonia processed diazo film specifications for stability.

Standards for Cartridge Loading Microforms

Film enclosure such as cores, reels, spools, cassettes, magazines, cans, containers, folders, envelopes, cartons, sleeves, and aperture cards, are addressed in the following:

ANSI IT9.11-1998 Processed Safety Film Storage

ANSI PH 1.53-1984 Enclosure Materials Used in Storage

All microfilm must be housed in closed containers made of non-ferrous materials or non-deteriorating plastic. The cores and reels must also be made of non-corroding materials.

ANSI/AIIM MS15-2000 Dimension and operational constraints for single core cartridges.

ANSI/AIIM MS 16-1993 Double Core Cassettes.

The responsibility for acquiring and maintaining storage cabinets for archival film products (both master and duplicate) should be agreed upon by both the agency and the customer.

ANSI PH 1.43-1985 Processed Safety Film Storage

The use of string, adhesives, rubber bands, etc., should be avoided as these materials can deteriorate and cause microscopic blemishes on the film.

The standards listed are referenced primarily to ensure the film product produced is archival and/or otherwise useable as intended by the agency. Therefore, any other applicable AIIM/ANSI standards are not specifically listed herein are to be followed to ensure the quality and functionality of the film products produced.

GLOSSARY

- **ADF** Automatic Document Feeder on scanner equipment.
- **ANALOG** Representation in a form similar to the source (e.g. paper to microfilm vs. paper to digital (TIFF).
- **APERTURE OR APERTURE CARD** Aperture card. 35mm Microform frame inserted into an IBM punch card with index information punched into the card.
- **ARCHITECTURE** How a system has been designed and the components connected together. (Software, Hardware, Networks, etc.)
- **ARCHIVAL QUALITY** The reliability of a storage medium to be able to reproduce a representative copy of an image. Archive expectations differ, but archival quality media should provide safe storage for at least 50 years.
- **BATCH** Bundling work in groups for high volume processing through a series of tasks (preparation, scanning, indexing, etc.)
- **BORDER CONTROL** Controlling the frame size of the scanned image such that a minimum amount of background is visible outside the edge of the image being captured.
- **BRIGHTNESS** The reflectiveness of an overall image, including both light and dark areas.
- **CAR** Computer Assisted Retrieval. Computer systems that locate or identify data stored on stored on Microform or paper and/or assist in the retrieval.
- **CLASSIFICATION** The systematic identification and arrangement of information, as opposed to indexing with is the location reference.
- **COLD** Computer Output to Laser Disc. Coded data (e.g. ASCII databases) generated by a host computer stored on optical disc. COLD replaces COM as a mainframe storage medium.
- **COM** Computer Output to Microform. The process of converting data to microfilm or microfiche.
- **CONTRAST** The degree of difference between the lightest and darkest tones in an image.
- **CONVERSION** The conversion of images in one medium type to images of a different medium type.
- **DAT** Digital Audio Tape. A magnetic tape technology used for backing up data.
- **DATA CAPTURE** The systematic extraction of data from various media. (Key Data Entry, Barcode recognition, OCR, mark sense recognition, etc.)
- **DATA WAREHOUSE** An archival database, as opposed to operational database.
- **DATABASE (OPERATIONAL)** The database(s) used in the day to day business of an enterprise.
- **DATABASE DESIGN** The design of a data model for deployment to database.
- **DATABASE MAINTENANCE**   Maintaining the structural (data) integrity of a database, together with various modification of the database as it may relate to a changing data model.
- **DATABASE MODELING** The construction of various data scheme that models the database capacity to meet the requirements of a business process in an enterprise.
- **DENSITY** Degree of darkness of an image as measured by a densitometer.
- **DESTINATION MEDIUM** The medium into which an image is being converted.
- **DIAZO**   A type of film and a process in micrographics by which a film copy is made of an original with the same polarity (negative to negative).
- **DIGITAL** Binary code used to record information, as opposed to analog. Tiff images are digital and film images are analog.
- **DLT** Digital Linear Tape. A magnetic tape technology originally developed by Digital for its VAX line. DLT uses half-inch, single-hub cartridges. It writes 128 or 208 linear tracks, depending on model, and provides native capacities from 10 to 40GB. DLT usage started to grow rapidly in 1995 and has been widely used on medium to large scale LANs.

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- **DOCUMENT SHREDDING**   Service consists of shredding confidential and other purged documents at the request of customer agencies.
    PAPER SIZES
    ◊   11 X 17 (B Size)
    ◊   18 X 24 (C Size)
    ◊   24 X 36 (D Size)
    ◊   48 X 72 (J Size)
- **DPI**   Dots Per Inch. A measurement of scanner resolution. The number of pixels a scanner can physically distinguish in each vertical and horizontal inch of an original image.
- **DUPLEX**   The ability of the scanner to scan both sides of a sheet simultaneously. Requires two scanner heads for two sides to be captured in one pass.
- **ELECTRONIC DOCUMENT MANAGEMENT**   The indexing and intelligent retrieval of documents (correspondence, spreadsheets, scanned images, etc.) maintained in an electronic format accessible to one or more computers.
- **ELECTRONIC DOCUMENT IMAGING**   The capture, storage and retrieval of scanned images (primarily bitmaps) maintained in an electronic format accessible to one or more computers.
- **FILE**   A collection of documents (one or more images) contained within a unique record.
- **FORMS RECOGNITION**   In OCR, the ability to recognize a specific type of document and to then accurately extract data from that form in predictable locations.
- **FRAME CONTROL**   The ability of a system to automatically adjust the frame size of an image consistent with the image border demands.
- **FSR**   Feasibility Study Report. FRS's are required by the State of California before an agency or department can proceed to implement any electronic document system.
- **GRAYSCALE**   The range of shades of black an image has, measured from zero for black and some other number (often 255) for white. A grayscale image allows for greater image adjustment post scan than a black and white image resulting in greater post scan viewing flexibility for a widely varying source image population.
- **HSM**   Hierarchical Storage Manager. Software used in the storage and retrieval of images on optical jukeboxes.
- **IDENTIFICATION SHEETS**   Paper printed with bar code(s) (or other machine recognizable symbology) capable of communicating classification and/or indexing information to the capture software driving the scanner, thereby automating the indexing process.
- **INDEXING**   Establishing one or more references to information which has been previously identified (or classified).
- **JOB**   A specific task or project.
- **JUKEBOX**   A device that holds multiple optical discs and one or more disc drives, and can swap discs in and out of the drive as needed. Also called a "near-line" category of storage.
- **KDE**   Key data entry. Manual data input by key data entry operators.
- **LTO**   Linear Tape Open. A family of open magnetic tape standards developed by HP, IBM and Seagate that are licensed to third party vendors.
- **MICROFICHE**   A sheet of microfilm containing multiple micro images in a grid pattern. It usually contains a title (header) that can be read without magnification.
- **MICROFILM**   A fine-grain, high resolution film containing an image greatly reduced in size from the original.
- **MICROFILM JACKET**   A flat, transparent plastic carrier with single or multiple film channels made to hold single or multiple microfilm images.
- **MICROFORM**   A form, usually film, that contains micro images.
- **MSA**   Master Service Agreement as defined in the body of this RFP.

MSA for Document Conversion Services

- **OCR**   Optical Character Recognition. Software with the ability to recognize and translate bitmapped scans or fax's of printed alphanumeric (or other specialized) characters into machine-readable (ASCII or formatted) text.
- **PATTERN RECOGNITION**   An OCR technique. The use of libraries of information about how characters are built - artificial intelligence experts - in all fonts and sizes. Also called feature extraction, because the experts examine certain parts, or features, of the characters and cumulatively agree on whether the character meets enough criteria to identify it as one character or another.
- **PDF**   Portable Document Format. The page description language used in the Acrobat document exchange system. PDF files have become de facto standard for transmitting documents to commercial printers and to the Web for online publishing.
- **PHYSICAL DOCUMENT TRACKING**   Software that tracks the location and other data relating to an object (e.g. paper file folders, documents, boxes, desks, etc.) by use of one or more machine readable identifying tags (e.g. bar codes, magnetic strips, etc.) and interfaces with an electronic document imaging (workflow, management, etc.) system, linking the physical items to the related electronic items.
- **PPM**   Pages Per Minute. The rated throughput of a scanner (printer, etc.).
- **PRODUCT**   Anything connected with this MSA which is not a service.
- **PROGRAMMING**   The writing of programming code for integration of products under this MSA.
- **PURGING**   The systematic removal of documents from a given population of source or converted images.
- **RAD**   Rapid Application Development.
- **RESOLUTION**   The number of dots (dpi) that make up an image on a screen or printer. The ideal resolution is a trade-off between image quality and the overhead in storage power and processing strength (which translates to cost) required to use it.
- **SILVER**   A type of film used in microform in photographing an original film image (as opposed to diazo).
- **SOURCE MEDIUM**   The medium of the source images (e.g. paper) prior to conversion to another medium.
- **STANDARD GROUP FOUR TIFF**   Standard compression algorithms, set by the CCITT for fax, used in conjunction with Tagged Image File Formatting (a bitmap file format invented by Aldus for describing and storing color and grayscale images).
- **THRESHOLD DETECTION**   The scanner software detection of pixels at varying levels enabling the capture of only images which meet certain minimum criteria, and the discarding of those that are of insufficient pixel number.
- **TIFF**   Tagged Image File Format. A bitmap file format, invented by Aldus, for describing and storing color, grayscale, and black and white electronic images.
- **TRAINING**   The instruction in the operation of various service or product components under this MSA..
- **TRC**   Technical Response Certification form. This form is included in the bid package for all bidders to use in the certification of the various technical requirements.
- **WORKFLOW**   Automating the orderly procedures for handling the conversion services business processes.